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BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268–0001

Inquiry Concerning City Carrier Costs	Docket No.PI2017-1

RESPONSES OF THE UNITED STATES POSTAL SERVICE TO QUESTIONS 1-5 OF CHAIRMAN'S INFORMATION REQUEST NO. 6

The United States Postal Service hereby provides its responses to the above-listed questions of Chairman's Information Request No. 6, issued on June 13, 2018. Each question is stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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1. The Postal Service states that Mobile Delivery Devices (MDDs) would capture parcel collection volume "through data obtained by Package Pickup, rather than the carrier entering separate piece counts for collected parcels, as was done during the [City Carrier Collection Mail Volume and Source Study]." Response to CHIR No. 4, question 7. The City Carrier Cost System (CCCS) estimates that in FY 2017, there were approximately 73.8 million Carrier Pickup or Package Pickup parcels.[1] In addition, the CCCS estimates another 174.1 million collected parcels are "Customer Outgoing Parcels" and another 14.7 million collected parcels are "Blue Box Parcels."[2]

a. Please describe activities carriers currently perform to collect "Customer Outgoing Parcels" and "Blue Box Parcels."

b. Please specify whether the MDDs would or could capture "Customer Outgoing Parcels" and "Blue Box Parcels."

   i. If so, please describe the steps required for the Postal Service and the carriers to record these volumes.

   ii. If not, please discuss the reason(s) why not.

RESPONSE:

a. Customer Outgoing Parcels and Blue Box Parcels are handled in the same way. The parcel is collected, transported back to the delivery facility, and placed in the appropriate Mail Transportation Equipment (MTE) to be delivered to the processing facility.

b. MDDs could capture both Customer Outgoing Parcels and Blue Box Parcels, given these items have barcodes. The Postal Service would have to mandate that carriers are to scan these parcels at the time of collection.

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[1] *See* Docket No. ACR2017, Library Reference USPS-FY17-34, December 29, 2017, Excel file "FY2017_Collection_Final_Public.xlsx," column G. The Postal Service confirmed that the CCCS estimated "Carrier Pickup" parcel collection volume is the same quantity as the "Package Pickup" volume. Response to CHIR No. 5, question 10.a.

[2] *See* Docket No. ACR2017, Library Reference USPS-FY17-34, Excel file "FY2017_Collection_Final_Public.xlsx," columns D and F, respectively.

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2. In its Response to CHIR No. 2, the Postal Service states that "[f]urther investigation is needed to determine whether customer collection volume captured on CCCS could be *accurately* weighted to estimate the customer collection volume at the ZIP Code level. Because CCCS is a stratified sample of route-days, all weighting methods to the ZIP Code-day level are necessarily biased, but its degree needs to be investigated." Response to CHIR No. 2, question 2.a (emphasis in original). Please clarify whether the Postal Service has conducted any further investigation regarding accurate weighting of customer collection volumes captured in the CCCS to estimate the customer collection volume at the ZIP Code level. Please describe the results of such investigation, if applicable.

RESPONSE:

Ideally, the Postal Service sees many advantages to the identification of a procedure using CCCS data that would accurately estimate customer collection volume at the ZIP Code level. This is because CCCS is an ongoing statistical system with a stratified design that conducts roughly 8,400 tests across over 5,500 ZIPs annually that are dispersed uniformly by day of week throughout the year. Thus, if CCCS could be used to accurately measure customer collection volume, then the city letter route model could be updated without the use of expensive special studies.

In Docket No. RM2015-7, there were four variables for which volumes were missing from operational data: 1) in-receptacle parcels, 2) deviation parcels, 3) accountables, and 4) customer collections. Currently, however, the Product Tracking System (PTS) shows promise as a potential basis to estimate in-receptacle parcels, deviation parcels, and accountables. If the potential is realized, then the only remaining volume measure needed would be customer

collections. Thus, finding a reliable and accurate measure of customer collection volume could allow the city carrier letter route street model to be updated more regularly because conceivably the volume variables would be readily available, and expensive and time-consuming special studies would not need to be conducted to measure them.

The city carrier letter route frame has approximately 11,000 ZIP Codes. Thus with 8,400 CCCS tests conducted annually, most sampled ZIP Codes are tested only once per year. Specifically, for FY 2017, the distribution of number of times ZIPs are sampled is included in Table 1.

Table 1

**Frequency Distribution of FY17
CCCS Sample ZIPs**

Number of Tests	Frequency Count	Relative Frequency
1	3,802	65.48%
2	1,398	24.08%
3	515	8.87%
4	69	1.19%
5	12	0.21%
6	5	0.09%
7	2	0.03%
8	2	0.03%
9	1	0.02%

The fact that sampled ZIPs are most commonly tested once per year highlights a fundamental difficulty with solely using CCCS collection data to estimate customer collection volume at the ZIP Code level. In FY2017, 361 ZIPs, or 6.2 percent, sampled by CCCS recorded zero customer collection

volume which regardless of the weighting factor applied would result in customer collection volume equal to zero for that ZIP in the regular delivery equation. This possibly significant underestimate of a cost driver could result in material bias to the remaining coefficients in the model. One possible remedy for that difficulty might be to investigate using multiple years of CCCS data to estimate customer collection volume. Using three years, FY2015 – FY2017 customer collection data measured from CCCS resulted in only eight ZIP Codes that had zero volume.

However, even if the 'zero volume' issue can be properly addressed, other issues exist with accurately inflating CCCS data from a route to a ZIP code. A simple way to estimate the total customer collection volume for a ZIP Code day would be to multiply the average customer collection volume recorded with CCCS tests in that ZIP Code by the number of city routes in the ZIP. However, this crude approach uses the potentially flawed assumption that each city route in a ZIP has the same amount of customer collection volume. Alternatively, the collection volume measured by CCCS could be inflated in ways that would not assume equal amounts of customer collection volume by route in a ZIP Code, and the Postal Service is currently investigating these approaches.

The Postal Service has also investigated using the customer collection data at the ZIP Code level gathered in the special study in Docket No. RM2015-7 to potentially model customer collection volume using ratios or econometrics. In terms of delivered volume, the strongest correlations for customer collection

volume has been with 1) street hours, 2) total delivered volume, and 3) DPS letters. However, initial econometric models with these variables have so far produced unsatisfactory results.

In sum, the Postal Service has a clear interest in seeking to find a reliable and defensible measure of customer collection volume using either CCCS or the data from Docket RM2015-7. This desire stems from the fact that customer collection volume is the only volume data element in the city carrier letter route model that the other current operational data systems do not even attempt to capture. Accordingly, the Postal Service is aggressively pursuing an accurate measure of customer collection volume that would pass scrutiny from interested parties and the Commission. At this point, however, the Postal Service has not yet found a sufficiently reliable model.

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3. In its Response to CHIR No. 2, the Postal Service states that it has started an investigation into "the feasibility of capturing customer collection volume through the MDDs," but that task "requires algorithmic and software changes, which must be designed and tested." *Id.* question 2.b.

a. Please describe the progress the Postal Service has made on designing and testing any such algorithmic or software changes to the MDDs and the results of any feasibility tests, if applicable.

b. Please discuss whether any further changes to the MDD software and related testing have been scheduled or planned. Please include the proposed schedule, if applicable.

RESPONSE:

a. Technical, operational, and staffing requirements have been discussed with the appropriate functional areas. The most acceptable usage of the MDDs to capture customer collection volume would involve a special study performed concurrent with the Delivery Operations Collection Density Study for city carriers. The Collection Density Study would only provide a two-week snapshot of customer collection volumes. Currently, the Postal Service sees this approach as expensive and impractical. It would require expensive annual training of all letter route carriers. In contrast, as explained in response to Item No. 2 from this CHIR, there is more reason to hope that CCCS data or data from Docket No. RM2015-7 will be able to provide an acceptable method for capturing customer collection volume. Accordingly, the Postal Service has not moved forward with any algorithmic or software changes to the MDDs for the purpose of capturing customer collection volume. The functionality for capturing customer collection

volumes is still feasible, but the Postal Service has not designed, developed, or tested such implementation.

b. No further changes to the MDD software or related testing has been scheduled or planned relating to this functionality. In addition to the software changes required to the MDDs, the Postal Service would still need to design and test the functionality, develop SOPs, train staff, and develop corresponding tables and variables to store collected data, as well as determine the most appropriate method to use such data in the cost models.

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4. Please explain the collection-related operations that city carriers who have collected mail on the street perform once they return to the office.

RESPONSE:

Collection mail and MTE are unloaded from the vehicle, then aggregated and sorted and transported to the processing facility.

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5. Please explain whether the office hampers that city carriers use to deposit their collection mail also include collection mail that has been unloaded or deposited by other postal employees, such as clerks or non-city carriers.

RESPONSE:

Yes, the MTE for collection mail will include mail deposited from other postal employees. There is no standard to indicate a distinction between the type of employee who should or should not be depositing collection mail in certain MTE. Instead, all mail is aggregated in the appropriate MTE and transported to the originating processing facility.